### (19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 22 September 2005 (22.09.2005)

### **PCT**

# (10) International Publication Number WO 2005/086705 A2

(51) International Patent Classification: Not classified

(21) International Application Number:

PCT/US2005/007127

(22) International Filing Date: 4 March 2005 (04.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 60/550.358 4 March 2004 (04.03.2004) US

(71) Applicant (for all designated States except US): ARIZONA BOARD OF REGENTS for and on behalf of ARIZONA STATE UNIVERSITY [US/US]; 699 S. Mill Avenue, Suite 601, Room 691 AA, Tempe, AZ 85281 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): ISLAM, Md Murshidul [BD/US]; 1137 East Orange Street, Apt. 31, Tempe, AZ 85281 (US). ALLEE, David, R. [US/US]; 825 West Edgemont Avenue, Phoenix, AZ 85007 (US). KONASANI, Vankata, Sivaram, Prasad [IN/US]; 1140

East Orange Street, Apt. 106, Tempe, AZ 85281 (US). **RODRIGUEZ, Armando, A.** [US/US]; 9618 South Ash Avenue, Tempe, AZ 85284 (US).

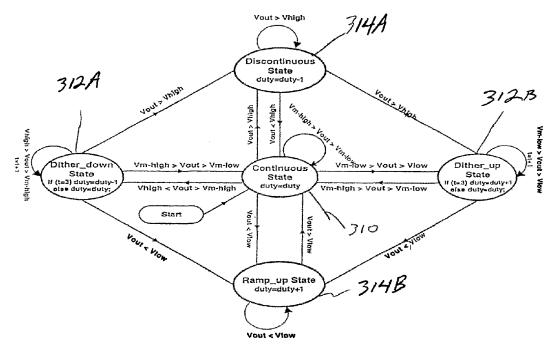
(74) Agent: NOBLITT, Daniel, J.; Noblitt & Gilmore, LLC, 4800 North Scottsdale Road, Suite 6000, Scottsdale, AZ 85251 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

[Continued on next page]

(54) Title: METHODS AND APPARATUS FOR ELECTRIC SUPPLY



(57) Abstract: An electrical system according to various aspects of the present invention includes a supply configured to provide a signal at a desired level. The supply monitors the output signal and compares the output signal to multiple thresholds. If the signal crosses a coarse-adjustment threshold, the supply coarsely adjusts the output to the load to quickly drive the signal toward the target level. If the signal crosses a fine adjustment threshold, the supply finely adjusts the output.

## WO 2005/086705 A2

FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

### Published:

 without international search report and to be republished upon receipt of that report